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## Special Issue Editorial

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# Walking New Avenues in Management Research Methods and Theories: Bridging Micro and Macro Domains

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*One of the most critical challenges faced by management scholars is how to integrate micro and macro research methods and theories. This article introduces a special issue of the Journal of Management addressing this integration challenge. First, the authors describe the nature of the micro–macro divide and its challenge for the field of management. Second, the authors provide a summary of each of the four guest editorials and seven articles published in the special issue and how each piece, in its own unique way and adopting a different perspective, makes a novel contribution toward addressing this challenge. Finally, they offer suggestions for future research that they hope will stimulate greater integration of management research with the goal of bridging not only the micro–macro gap but also the science–practice gap.*

**Keywords:** *research methods; epistemology; management; multi-level*

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*Acknowledgments: Authorship order is alphabetical. We thank Talya N. Bauer, editor of Journal of Management, for her vision, encouragement, and support regarding the publication of this special issue.*

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In the field of physics, one of the biggest challenges and critical issues is how to integrate the laws that explain the behavior of small objects (i.e., quantum theory) with the laws that explain the behavior of large objects (e.g., relativity theory; Padmanabhan, 2006). Such integration would lead to a “grand relativistic quantum field theory.” The field of management faces a similar challenge; that is, how to integrate theories that explain phenomena at the individual or group level of analysis (e.g., goal setting) with theories that explain phenomena at the organizational level of analysis (e.g., resource-based view of the firm) to create a “grand organization and management theory.”

The modern field of management began with an integrated focus as exemplified in Frederick Taylor's (1911) *The Principles of Scientific Management*, which examined how individual performance improvements could lead to great gains at the organizational (i.e., bottom line) level of analysis. Yet as the field developed, specialization has led to a divide between what some label “micro” and “macro” management research domains. Researchers typically specialize in either micro (e.g., organizational behavior [OB], human resource [HR] management) or macro (e.g., business policy and strategy [BPS], organization and management theory [OMT]) domains. This divide is further reflected by the preference for researchers to publish in either macro (e.g., *Strategic Management Journal*) or micro (e.g., *Journal of Applied Psychology*) journals. Not only do micro and macro scholars have differing areas of interest, but the disparities extend to the articles that they write as well. For example, Wiseman and Skilton (1999) reported that OB and strategic management outlets differ in many characteristics, including average article length, acceptance rates, and even the average number of coauthors per article. Although journals such as *Academy of Management Journal (AMJ)* and *Journal of Management* publish research conducted by micro and macro researchers, the perception is that an integration of these perspectives continues to pose an important challenge for the advancement of the field (Hitt, Beamish, Jackson, & Mathieu, 2007). Moreover, another sign of a micro–macro divide is that micro researchers perceive *AMJ* as being a macro journal whereas macro researchers perceive *AMJ* as being a micro journal. For example, as described by Schminke and Mitchell (2003: 280), “At a recent Academy meeting, the author of a very nice paper on ethical decision making was asked why he hadn't submitted it to *AMJ*. He replied, ‘Because everyone knows *AMJ* is a macro journal!’”

The membership pattern of Academy of Management (AoM), which is the oldest and largest scholarly management association in the world, is another indicator of this divide because membership is spread across micro (OB) and macro (BPS) clusters and there is not much overlap between them (Pearce, 2003). Consider the following membership clusters as of November 30, 2000: Of the 12,003 members of the BPS (3,125), HR (2,583), OB (3,641), and OMT (2,654) Divisions, only 312 (2.6%) were joint members of OB and BPS, 319 (2.7%) were joint members of HR and OMT, and 214 (1.8%) were joint members of HR and BPS. In contrast, 1,315 (11%) were joint members of HR and OB and 878 (7.3%) were joint members of BPS and OMT (Kerry J. Ignatz, AoM member services manager, personal communication, July 16, 2010). Membership clusters as of July 15, 2010, follow a similar pattern and are just as indicative of a micro–macro divide. Specifically, of the 19,411 members of the BPS (5,416), HR (3,669), OB (6,175), and OMT (4,151) Divisions, only 446 (2.3%) were joint members of OB and BPS, 383 (2%) were joint members of HR and OMT, and

312 (1.6%) were joint members of HR and BPS. In contrast, 2,055 (10.6%) were joint members of OB and HR and 1,457 (7.5%) were joint members of BPS and OMT (<http://www.aomonline.org/aom.asp?id=18>). The AoM membership chasm led past AoM president Jone L. Pearce (2003) to ask whether we have a “bifurcated Academy.”

Evidence of a divide between micro and macro domains is also reflected by the sometimes divergent research design, measurement, and data analysis techniques used across these domains (Aguinis, Pierce, Bosco, & Muslin, 2009). Also, even when some of the methodological procedures used are identical, researchers from different domains use different symbols and labels that lead to lack of communication between micro and macro researchers and even confusion and misunderstandings. For example, macro researchers, following econometrics and time-series terminology, refer to a “fixed effect” whereas micro researchers, following growth modeling terminology, refer to the same phenomenon using the label “random effect” (Ployhart & Vandenberg, 2010).

The presence of the micro–macro divide may be a contributor to another important divide in our field, namely, the science–practice divide (Cascio & Aguinis, 2008; Rynes, 2007). Practitioners who face day-to-day management challenges are interested in solving problems from all levels of analysis. For example, they are interested in performance issues at the organizational and individual levels of analysis. However, if research produced by management scholars addresses only the organizational or individual level, then it is likely that practitioners will continue to believe that the research produced by management scholars lacks relevance and, hence, “does not matter” (Hambrick, 1994). This divide may be furthered by the institutionalization of pedagogical offerings that tend to focus on either individuals (i.e., OB and HR) or organizations (i.e., strategic management and entrepreneurship) issues.

It may be that, as has been noted regarding differences between researchers and practitioners (Saari, 2007), micro and macro researchers have different goals and agendas. However, micro and macro researchers are both concerned with management and organizations. Moreover, micro and macro domains are similar in many ways. For example, although a BPS researcher may study CEO decisions and top management teams with an eye toward understanding the determinants of organizational survival and performance, and organizations as a whole, most introductory OB textbooks note in their first chapter that OB covers individual, group, and organizational levels. Also, a rich history concerning individual decision making and group and team dynamics is also reflected in OB research. So, much like diversity research, although there may be surface-level differences (Harrison, Price, & Bell, 1998), a more detailed and nuanced analysis actually reveals more commonalities than differences.

The goal of this special issue is to identify existing gaps as well as bridges between micro and macro domains and serve as a catalyst for future management research that will advance the bridging agenda. The special issue includes four guest editorials and seven articles addressing theory and methodological issues. Next, we provide a summary of each of these contributions.

## Guest Editorials

This special issue includes guest editorials by leading scholars in the fields of strategic management (Dan R. Dalton and Catherine M. Dalton), entrepreneurship (Dean A. Shepherd),

HR management (Mark A. Huselid and Brian E. Becker), and OB (Denisse M. Rousseau). Each of these thought-provoking editorials addresses micro–macro gaps and also provides useful, specific, and actionable suggestions for establishing bridges in future management research.

In their guest editorial titled “Integration of Macro- and Micro-studies in Governance Research: CEO Duality, Board Composition, and Financial Performance,” Dan R. Dalton and Catherine M. Dalton (2011 [this issue]) discuss the need to bridge a micro–macro gap in corporate governance research. Specifically, Dalton and Dalton note the absence of multilevel research examining the relationship between the composition of a firm’s board of directors, the dual role of serving as a firm’s chief executive officer (CEO) and board chairperson concurrently, and the firm’s financial performance. According to Dalton and Dalton, the corporate governance literature does not provide evidence that board composition and board leadership are related to a firm’s financial performance regardless of how performance is operationalized. To address this lack of evidence and bridge a micro–macro gap, the authors call for multilevel research examining the relationship among board composition (individual level), board leadership structure (group level), and firm performance (organizational level).

Dean A. Shepherd (2011 [this issue]) discusses the need to bridge a micro–macro gap in entrepreneurship research in his guest editorial titled “Multilevel Entrepreneurship Research: Opportunities for Studying Entrepreneurial Decision Making.” Specifically, he calls for multilevel research on individuals’ decision making in an entrepreneurship context. Shepherd asserts that to understand decisions about entrepreneurship tasks (e.g., firm emergence activities, hiring key personnel, selecting venture capitalists), methods such as conjoint analysis can be used to capture individuals’ decision processes and decompose them into underlying structures. Using metric conjoint analysis or policy capturing methodology along with random coefficient modeling, researchers would be able to identify (a) common decision policies among samples of individual entrepreneurs and (b) individual differences as moderators of these common decision policies. Shepherd also notes that individuals are embedded within contexts (e.g., country). Entrepreneurs’ decisions must therefore be examined across the following micro and macro levels: entrepreneurship decision (Level 1), individuals’ decision policies (Level 2), and country (Level 3). Finally, Shepherd notes that intraindividual differences (e.g., an entrepreneur’s change in emotion) may exist when making entrepreneurship decisions. Thus, the relationship between situational context and entrepreneur’s decision policies must also be examined from a multilevel perspective.

Commenting specifically from an HR management perspective, in their guest editorial titled “Bridging Macro and Micro Domains: Workforce Differentiation and Strategic Human Resource Management,” Mark A. Huselid and Brian E. Becker (2011 [this issue]) discuss the need to bridge a micro–macro gap in strategic HR management research. Specifically, the authors describe workforce differentiation as an HR architecture in which the same job may contribute to strategic success in different ways within and across firms depending on its location within the firm’s strategic capabilities. According to Huselid and Becker, strategic capabilities are bundles of information, technology, and people needed to implement a firm’s strategy. To bridge a micro–macro gap, the authors call for multilevel research that focuses on antecedents and consequences of workforce differentiation to understand the causal processes that link investments in HR management systems with a firm’s performance. Huselid

and Becker recommend that this multilevel research include the development of new measures of organizational strategy, strategic capabilities, strategic jobs, and workforce differentiation.

In her guest editorial, Denise M. Rousseau (2011 [this issue]) offers a perspective on the micro–macro gap in management research that addresses specifically the field of OB but applies to the entire field of management. In her editorial titled “Reinforcing the Micro/Macro Bridge: Organizational Thinking and Pluralistic Vehicles,” Rousseau argues that organizational research is less divided along micro and macro lines than is currently assumed. Instead, the existing bridge between micro and macro domains simply needs regular maintenance. Rousseau asserts that multilevel organizational thinking is native among organizational scientists and that we need to continue to train and develop a community of scholars who theorize and study multilevel aspects of organizations. Finally, as vehicles for the continued integration of micro–macro domains in management, Rousseau recommends that organizational scientists should (a) be more explicit about the rationale for and implications of using their selected theoretical frameworks, (b) conduct more systematic literature reviews from a multilevel perspective, and (c) conduct more computer simulation studies to understand multilevel organizational processes that cannot be examined with other traditional research methods.

## Articles

The seven articles in this special issue address a diversity of topics ranging from epistemological to domain specific to methodological. In their own unique way, each article makes a novel contribution to bridging micro and macro domains in management.

Thomas P. Moliterno and Douglas A. Mahoney (2011 [this issue]) provide valuable insights in their article titled “Network Theory of Organization: A Multilevel Approach.” They review the network theoretical perspective, which is based on the notion of how individuals, groups, or organizations are tied to networks based on social relationships such as advice or resources sharing. They note that this research stream has typically relied on single levels of analysis despite the potential for multilevel investigation. The current state of the literature suggests opportunities for a number of contributions to research on networks as well as research in multilevel issues. In regards to theoretical insights, the authors introduce the notion of systems of nested networks. They argue that embracing systems characterized by units and their interactions grouped in a hierarchical or nested structure allows for a truly multilevel approach to research on networks. Consequently, they present several thoughtful ideas on the path toward a multilevel network theory of organization. Their conceptual arguments provide a firm grounding for several key methodological considerations for future empirical efforts, and the authors provide many concrete suggestions to build the necessary tool kit to embrace a multilevel network perspective. Overall, their work provides a timely review on the state of social network research from a multilevel perspective and one that has both conceptual and empirical implications.

Carlo Salvato and Claus Rerup (2011 [this issue]) explore the building blocks of competitive advantage in their article titled “Beyond Collective Entities: Multilevel Research on

Organizational Routines and Capabilities.” Routines are complex organizational processes that can be applied at various organizational levels. In contrast, capabilities are collections of routines that can be used to support organizational goals, such as innovation or value creation. The authors use a multilevel framework to assess the nature of routines and capabilities as well as to understand better how routines and capabilities change over time. Drawing on an extensive literature review, the authors recommend that future studies (a) unpack routines and capabilities into component elements and (b) explore methodological tools to understand better how the two elements relate across organizational levels. To facilitate future studies, they identify a set of research questions and specific methodologies in four general areas of inquiry: individual actions, individual emotions, individual cognitions, and the linkage between routines and organizational schema.

In their article titled “Multilevel Challenges and Opportunities in Social Capital Research,” G. Tyge Payne, Curt B. Moore, Stanley E. Griffis, and Chad W. Autry (2011 [this issue]) examine how an explicit emphasis on levels of analysis can enrich the study of social capital. The authors begin with a review of empirical and conceptual studies on social capital. These articles are classified according to the type of ties (internal vs. external) and level of analysis (individual vs. collective). Overall, there has been substantial diversity in social capital research to date, both within and across levels. However, the authors find that the vast majority of empirical social capital studies entail a single level of analysis and that there are relatively few multilevel empirical studies. In contrast, there are several conceptual studies of social capital that have adopted a multilevel perspective. Exemplars of empirical cross-level studies are then presented, followed by a suggested agenda of multilevel social capital research topics for micro and macro management scholars.

In their article titled “Bridging Domains in Workplace Demography Research: A Review and Reconceptualization,” Aparna Joshi, Hui Liao, and Hyuntak Roh (2011 [this issue]) provide guidelines for conducting future multilevel workplace demography research. With respect to bridging micro and macro domains, the authors’ guidelines are unique in that they entail a two-way approach of linking macro-level theories to micro-level demography research and vice versa. First, Joshi et al. discuss demography constructs that have been applied at the individual, team, and firm levels of analysis, and they identify challenges and trends in this area of research. Second, the authors review workplace demography research with a focus on the following two dimensions: (a) level of analysis at which demography has been operationalized and (b) level of analysis at which outcomes have been identified. Based on these two dimensions, Joshi et al. identify three streams of workplace demography research—individual dissimilarity (or relational demography) research, team diversity research, and firm or top management team diversity research. Third, after identifying demography research at each level of analysis, the authors review key theoretical approaches and empirical findings. Finally, based on recent trends in each of these areas, Joshi et al. identify opportunities for bridging micro–macro levels, and they identify methodological approaches to accomplish these bridging efforts in workplace demography research.

In their article titled “Decisions, Decisions! How Judgment Policy Studies Can Integrate the Macro and Micro Domains in Management,” Richard L. Priem, Bruce A. Walters, and Sali Li (2011 [this issue]) advocate the use of judgment policy analysis as a methodology for developing and testing the multilevel theories needed to bridge the gap between micro and

macro domains in management. The authors make the key point that all individuals in an organizational hierarchy, from CEOs to subordinates, make decisions that affect individual, group, and organizational success. By analyzing the judgment policies or cognitive “theories in use” that underlie these individuals’ decisions and thus guide their actions, Priem et al. assert that management scholars would be able to construct a bridge from both sides of the micro–macro chasm simultaneously. The authors draw from four literatures—trust, diversity climate, workplace romance and sexual harassment, and strategy implementation—to provide examples of how judgment policy analytic methods can bridge the micro–macro divide by examining decisions made by high- and low-level employees. Priem et al. demonstrate how to use decomposition methods (e.g., metric conjoint analysis, policy capturing) and composition methods (e.g., verbal protocol analysis, causal mapping, information search analysis) to examine individuals’ decisions within and across organizational levels. The authors conclude by highlighting additional examples of management topics that could benefit from multi-level judgment policy studies (e.g., business ethics, entrepreneurial opportunity identification, international business) and identifying challenges of conducting multilevel judgment policy research (e.g., gaining access to data).

In their article titled “The Myth of ‘the’ Management Divide: Bridging System-Level and Disciplinary Divides,” Janice C. Molloy, Robert E. Ployhart, and Patrick M. Wright (2011 [this issue]) offer a nuanced understanding of the chasms that occur among scholars. Molloy et al. begin with three different levels of inquiry—individuals and groups, organizations, and economic and social systems—and discuss how these levels map onto the research of various management subfields. Next, they examine how three disciplinary perspectives—economics, psychology, and sociology—influence the distinction between levels, including the types of questions asked and how these questions are answered (i.e., theory and methods). Subsequently, the authors conduct a content analysis of 300 articles to evaluate the extent and type of bridging that has been recently published. Based on this content analysis, the authors identify a set of guidelines to facilitate future studies that bridge the divides of subfields and levels.

Finally, in their article titled “The Etiology of the Multilevel Paradigm in Management Research,” John E. Mathieu and Gilad Chen (2011 [this issue]) posit that a multilevel perspective is now well established in contemporary management research. Mathieu and Chen’s review of the evolution of the multilevel paradigm provides valuable insights with respect to how far the management field has progressed over the past quarter of a century in areas of theory, measurement, design, and analysis. Despite advancements, the authors outline five significant challenges to the multilevel paradigm that represent opportunities for the field to continue to evolve, if properly addressed. First, the identification and specification of some units of analysis continue to pose challenges. Second, many multilevel theories and methods assume that units are perfectly nested within higher levels (e.g., individuals within groups or firms within industries), a situation that often does not reflect the complexities of most organizational research contexts. Third, multilevel temporal issues pose challenges as each level of analysis is subject to dynamics involving time, a problem that is amplified as some units (individuals within a team or firms within a strategic group) may change their higher level membership over time. Fourth, although continually under development and improvement, analytic challenges because of the limitations of current software make the

model specification of some conceptual multilevel models and common metrics for model assessment (e.g.,  $R^2$ ) impossible. Fifth, multidisciplinary approaches would enhance the development of many multilevel research questions. Vigilance to the issues identified in this review should allow the paradigm of multilevel research to continue to evolve in a positive direction over the next quarter of a century.

## Conclusions

The guest editorials and articles included in this special issue indicate that the field of management has made important progress in terms of bridging micro and macro domains. However, much progress remains. We refer readers to each of the editorials and articles for specific suggestions. Also, future research could address additional key theories that have the potential to bridge micro and macro management research areas but have not yet seen such integration in the existing literature. In addition, we offer the following suggestions in the form of key questions and specifically related to methodological issues to help guide future micro–macro bridging efforts in management research:

- What are some best-practice recommendations in terms of research design, measurement, and data-analytic approaches that have the potential to bridge micro and macro research domains in management?
- What are some additional illustrations of how particular methodological approaches can be used effectively to bridge micro and macro management research domains?
- What unique epistemological approaches can be used to integrate micro and macro management research domains?
- What are some novel methodological approaches for construct measurement that span a wide spectrum of micro and macro management research?
- What are some ways of integrating qualitative and quantitative (or inductive and deductive) approaches with the potential to bridge micro and macro management research domains?

In closing, we hope this special issue will serve as a catalyst for further micro–macro integrative efforts in our field. We believe that such integration will help bridge not only the micro–macro gap but also the much lamented science–practice gap in management.

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